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10/520,606

01/06/2005

Egbert Jan Van Riet

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9765

22511 7590 09/23/2008

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EXAMINER

BOMAR, THOMAS S

ART UNIT

PAPER NUMBER

3676

NOTIFICATION DATE

DELIVERY MODE

09/23/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/520,606 | Applicant(s) VAN RIET, EGBERT JAN | |
| | Examiner Shane Bomar | Art Unit 3676 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2-7 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,257,442 to Claycomb.

Regarding claims 2-6, Claycomb discloses a drilling system for drilling a well bore into an earth formation, comprising: drilling means for drilling a well bore with an inherent pumping means for pumping drilling fluid into the well bore during drilling (col. 1, lines 11-23); and a drilling fluid outlet system for retrieving drilling fluid from the well bore, said drilling fluid outlet system comprising a choke means (the upper and lower chokes at the far right side of Fig. 3) for choking the return flow of retrieved drilling fluid, and alternating means 122 for alternating the flow direction through the choking means (i.e., flow either goes through one choke, or the means is alternated so that flow goes through the other choke). The drilling fluid outlet system further comprises an accumulator 134, filters 102 and 118 are arranged in connection to the choke means, and an inlet and an outlet, wherein the choke means comprise a first inlet/outlet connection in the upper choke, a second outlet/inlet connection in the lower choke, and the alternating means connect the inlet alternatingly to the first or second connection and the outlet alternatingly to the second or first connection and wherein the alternating means comprise a four way valve 122 (Fig. 3), having four connections connected two by two, and

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wherein the choking means comprise a bi-directional choke (i.e., each choke is capable of permitting flow therethrough in either direction; however, flow can be directed in one direction to one choke, or in another direction to the other choke; see col. 7, lines 13-63).

Regarding claim 7, the combination of the two chokes make up the choke means that is bi-directional (see immediately above), although each choke is used for unidirectional flow (Fig. 3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claycomb.

Claycomb teaches a method of drilling a wellbore into an earth formation using the drilling system similar to that of claims 2-5 above. However, it is not specifically taught that when the flow direction through the choke means is alternated debris will be flushed away from the choke means. Nevertheless, it is noted that when the top choke is open to flow, the bottom choke is closed to flow (Fig. 3). When a predetermined pressure condition is met and it is desired to open and direct fluid flow through the closed choke, the other choke is then closed. It would be obvious to one of ordinary skill in the art that some drilling fluid will become trapped in the other choke as it closes, wherein said drilling fluid will also contain debris as is notoriously known in the art. This debris will then become trapped in the choke until such a time when the choke is opened again to flow therethrough. At such time, the new flow of drilling

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fluid will achieve the predictable result of flushing the debris that remained in the choke from the choke.

Response to Arguments

5. Applicant's arguments filed April 18, 2008 have been fully considered but they are not persuasive. It appears that the crux of the Applicant's arguments is that Claycomb allegedly does not teach means for alternating the flow direction through the choking means. However, as shown in the rejections above, the Examiner sees the flow direction as being alternated from flowing through one choking means and then to another choking means by the valve 122. Therefore, it appears that the Claycomb reference does teach that which is currently claimed. It is noted that the Applicant states that the direction of flow through the choke may be reversed in the instant application. However, the limitation of the flow direction being ***reversed*** is not currently claimed, thus making the arguments more limiting than the claims themselves (emphasis added).

It is further noted that the Applicant has presented no arguments against the Examiner's rejection of claim 6. Thus, the rejection of claim 6 is clearly still valid and has been repeated above.

Terminal Disclaimer

6. The terminal disclaimer filed on April 18, 2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 11/769,540 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is (571)272-7026. The examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shane Bomar/

Primary Examiner, Art Unit 3676